TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WF70-800480D2L#0SPW3-FC

General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	800 x RGBx480(TFT)	dots
Module dimension	165.0(W) x 104.6(H) x 7.3 (D)	mm
Active area	152.4 x 91.44	mm
Pixel pitch	0.1905x 0.1905	mm
LCD type	TFT, Normally Black, Transmissive	
View Angle	85/85/85/85	
TFT IC	RM53052+RM57452 or Equivalent	
Aspect Ratio	16:9	
Backlight Type	LED,Normally White	
TFT Interface	LVDS	
CTP Driver IC	ILI2130 or equivalent	
CTP Interface	I2C	
CTP FW Version	0x07.0x00.0x00.0x00.0x70.0x44.0x0A.0x02	
CTP Resolution	16384*16384	
Touch Panel	Projected Capacitive Touch Panel	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

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Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-30	—	+80	℃
Storage Temperature	TST	-30	—	+80	℃

Electrical Characteristics

1. Operating conditions:
Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power voltage	VDD	2.9	3.3	3.6	V
Analog Power	AVDD	-	13.0	-	V
TFT Gate ON Voltage	VGH	-	25.0	-	V
TFT Gate OFF Voltage	VGL	-	-5.9	-	V
TFT Common Voltage	Vcom	-	6.2	-	V
Power Current	IDD	-	19.3	29	mA
Analog Power Current	IAVDD	-	11.5	18	mA
TFT Gate ON Current	IVGH	-	0.27	1.0	mA
TFT Gate OFF Current	IVGL	-	0.27	1.0	mA
TFT Common Current	IVCOM	-	1.3	2	uA
Supply CTP	VDDT	3.1	3.3	3.5	V
	I_{CTP}	—	65	100	mA

2. LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	—	—	110	—	mA
LED voltage	VLED+	22.4	24.0	25.6	V
LED Life Time	—	50,000	—	—	Hr

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Interface

1. LCM PIN Definition

Pin No.	Symbol	Function
1	VCOM	Common Voltage
2	VDD	Digital circuit
3	VDD	Digital circuit
4	NC	No connection
5	RESET	Global reset pin
6	STBYB	Standby mode, Normally pulled high STBYB = “1”, normal operation STBYB = “0”, timing controller, source driver will turn off, all output are High-Z
7	GND	Ground
8	RXIN0-	Negative LVDS differential data input
9	RXIN0+	Positive LVDS differential data input
10	GND	Ground
11	RXIN1-	Negative LVDS differential data input
12	RXIN1+	Positive LVDS differential data input
13	GND	Ground
14	RXIN2-	Negative LVDS differential data input
15	RXIN2+	Positive LVDS differential data input
16	GND	Ground
17	RXCLKIN-	Negative LVDS differential clock input
18	RXCLKIN+	Positive LVDS differential clock input
19	GND	Ground
20	RXIN3-	Negative LVDS differential data input
21	RXIN3+	Positive LVDS differential data input
22	GND	Ground
23	NC	No connection
24	NC	No connection
25	GND	Ground
26	NC	No connection
27	NC	No connection
28	SELB	6bit/8bit mode select H:8bit / L:6bit

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29	AVDD	Power for Analog Circuit
30	GND	Ground
31	NC	No connection
32	NC	No connection
33	L/R	Horizontal inversion
34	U/D	Vertical inversion
35	VGL	Negative power for TFT
36	NC	No connection
37	NC	No connection
38	VGH	Positive power for TFT
39	NC	No connection
40	NC	No connection

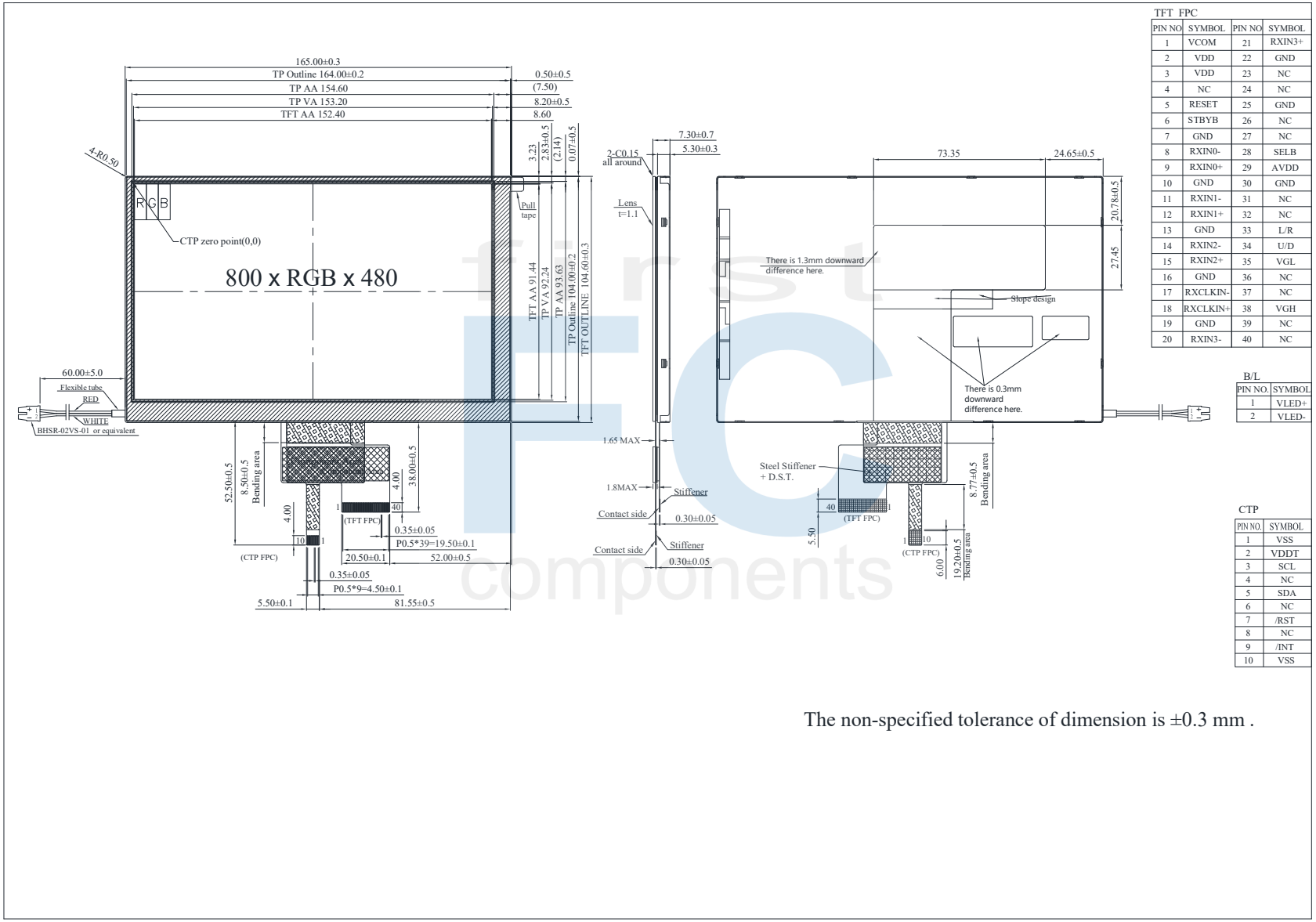
2. Backlight Driving Part

Pin No.	Symbol	Description
1	VLED+	Red, LED_ Anode
2	VLED-	White, LED_ Cathode

3. CTP PIN Definition

Pin	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT	Power Supply : +3.3V
3	SCL	I2C clock input
4	NC	No connect
5	SDA	I2C data input and output
6	NC	No connect
7	/RST	External Reset, Low is active
8	NC	No connect
9	/INT	External interrupt to the host
10	VSS	Ground for analog circuit

Contour Drawing



TFT FPC

PIN NO	SYMBOL	PIN NO	SYMBOL
1	VCOM	21	RXIN3+
2	VDD	22	GND
3	VDD	23	NC
4	NC	24	NC
5	RESET	25	GND
6	STBYB	26	NC
7	GND	27	NC
8	RXIN0-	28	SELB
9	RXIN0+	29	AVDD
10	GND	30	GND
11	RXIN1-	31	NC
12	RXIN1+	32	NC
13	GND	33	L/R
14	RXIN2-	34	U/D
15	RXIN2+	35	VGL
16	GND	36	NC
17	RXCLKIN-	37	NC
18	RXCLKIN+	38	VGH
19	GND	39	NC
20	RXIN3-	40	NC

B/L

PIN NO.	SYMBOL
1	VLED+
2	VLED-

CTP

PIN NO.	SYMBOL
1	VSS
2	VDDT
3	SCL
4	NC
5	SDA
6	NC
7	/RST
8	NC
9	/INT
10	VSS

The non-specified tolerance of dimension is ±0.3 mm .

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